

ORDINANCE NO. 0-12-02

AN ORDINANCE TO REPEAL AND REENACT, WITH
AMENDMENTS, CHAPTER 7 OF THE GAITHERSBURG CITY CODE
ENTITLED, "ELECTRICITY," SO AS TO ADOPT THE
2002 NATIONAL ELECTRICAL CODE (NFPA 70)

BE IT ORDAINED by the Mayor and City Council of Gaithersburg, in public meeting assembled, that Chapter 7 of the City Code entitled, "Electricity" is repealed and reenacted to read as follows:

Chapter 7

ELECTRICITY

Sec. 7-1. Adoption of National Electrical Code.

The National Electrical Code, NFPA 70, 2002 Edition, effective per the National Fire Protection Association on August 1, 2001, is hereby adopted and incorporated herein by reference and shall be the governing standard for all electrical work performed in the corporate limits of the City. When provisions of this article conflict with the provisions of the National Electrical Code, 2002 Edition, then the provisions of this article shall govern. Copies of the National Electrical Code, 2002 Edition, as adopted, shall be available for inspection by the public during regular City office hours.

Sec. 7-2. Enforcement.

Wherever the 2002 National Electrical Code uses the words "the authority having jurisdiction of enforcement of this Code," or words having a similar meaning, they shall be construed to mean the city manager or his designee.

Sec. 7-3. Electrician's license—Required.

Before any person shall hereafter engage in the business of doing any work covered by this chapter, he shall obtain from the city manager or his designee a master electrician's license or master electrician limited license.

Sec. 7-4. Same—Qualifications of applicants.

An electrician's license shall be issued to any person who holds a valid electrician's license from Montgomery County or any person to whom the City is required to issue a license because of the terms of the *Business Occupations & Professions* Article, Section 6-301, et. seq. of the Annotated Code of Maryland, or amendment of that section.

Sec. 7-5. Same—Fee; issuance; term; expiration date.

Upon payment of the license fee to be set from time to time by resolution of the council, and filing of the bond required by Section 7-7, such person shall be issued a license to practice such business for a term of not more than two years. Such license shall expire as of August 31 of every other year.

Sec. 7-6. Same—Suspension and revocation.

Any such license may be suspended for a period not to exceed sixty (60) days by the city manager or his designee for violation of this chapter. In the event of a subsequent violation, the city manager may revoke such license.

The electrician may, in case of denial, suspension or revocation of a license, appeal the decision of the city manager to the board of appeals. Such an appeal shall be governed by the provisions of sections 24-187, 24-188, 24-189, 24-190, and 24-193 of this Code. The board may affirm or reverse the denial, suspension or revocation with or without conditions. The electrician may appeal the decision of the Board of Appeals within 30 days of the date of the written decision, to the Circuit Court pursuant the Maryland Rules of Procedure governing administrative appeals.

Sec. 7-7. Electrician's bond.

Every electrician shall file with the City a bond in the sum of one thousand dollars (\$1,000.), or proof of insurance with a minimum of three hundred thousand dollars (\$300,000.) general liability, and one hundred thousand dollars (\$100,000.) property damage coverage conditioned on the performance of all work in accordance with this chapter and indemnify and save harmless any person who shall suffer damage by failure of such person to do so. A new bond shall be required every two years. Any electrician who is licensed as a master electrician or master electrician-limited by the State of Maryland and provides the City proof of such is exempt from the bond requirement while his or her state license is in effect.

Sec. 7-8. Permits for electrical installations.

Before any person shall do any work covered by this chapter, he or she shall obtain a permit from the City. The applicant shall pay therefore a fee as established from time to time by resolution of the City Council.

Sec. 7-9. Prerequisites for connection of electric power to consumer's property.

No electric power company shall attach its power lines or electric meters to any consumer's property within the City unless all required electrical permits have been obtained and all required electrical inspections have been passed.

Sec. 7-10. Inspections.

All electrical work for which a permit is required by this chapter shall be inspected to assure compliance with this chapter. The licensed electrician who obtained the permit for the electrical work shall be responsible for obtaining all the required inspections.

Sec. 7-11. Concealment of wiring or appurtenance prior to inspection prohibited.

No electric wiring or appurtenance shall be concealed until it has been inspected and approved.

Sec. 7-12. Stop-work orders.

The city manager or his designee shall have the power to stop electrical work when he is reliably informed that such work being installed is not in conformity with this chapter or may otherwise present a safety hazard.

Sec. 7-13. Defective existing wiring.

If any existing electric wiring system is found upon inspection to be defective and unsafe, upon notification by the city manager, or his designee, the use of such system shall be discontinued until the defect has been corrected and approved.

Sec. 7-14. Amendments to National Electrical Code.

The National Electrical Code, 2002 Edition, is amended in the following respects:

- (1) Section 110.14(a) is amended by adding the following:
"In all cases, copper-clad aluminum wire is prohibited."
- (2) Section 110.26(E) is amended by deleting the exception entirely.
- (3) Section 210.8(a) is amended by adding the following:
"(9) All 125-volt, single-phase, 15- and 20-ampere receptacles located within six (6) feet of a laundry sink or any other type of sink."

Exception: The laundry circuit as required by Sections 210.52(f) and 220.3.

- (4) Section 210.23 is amended by adding the following subsection (d), which reads as follows:
"(A)" "(3)" *Dwelling unit:* general lighting branch circuits in dwelling occupancies served by a fifteen ampere branch circuit shall not have more than twelve (12) power consuming outlets. A duplex receptacle is considered one (1) outlet."

"A small appliance branch circuit in dwelling occupancies served by a twenty ampere branch circuit shall have not more than eight (8) receptacle outlets."

- (5) Section 210.52(A) is amended by adding the following paragraph to the end of that section: "General lighting branch circuits in dwellings must not have more than 12 power consuming outlets. A duplex receptacle is considered to be one outlet. Smoke detectors are not considered to be power-consuming devices (for counting purposes.)"
- (6) Section 210.52(E) is amended adding the following sentence to the end of that section: "When an addition is made to an existing dwelling which is not equipped with an outside ground-fault circuit-interrupter (GFCI) receptacle, a GFCI receptacle, accessible at grade level, must be installed on the outside of the new addition."

- (7) Section 220.4(A) is amended by adding the following sentence and exceptions: "Each fixed appliance must be served by an individual branch circuit.
Exception No. 1: Electric baseboard heaters.
Exception No. 2: Appurtenant equipment to furnaces, such as humidifiers or electric air cleaners.
Exception No. 3: Other equipment having motors rated $\frac{1}{4}$ horsepower or less."
- (8) Section 230.2 is amended by adding a new subsection (F) entitled, "Individual Metering" to read as follows:
"(F) Individual meters to measure electrical consumption shall be provided for each dwelling unit of a multifamily group when such dwelling units have separate heating and/or cooling systems whose primary energy source is electricity."
- (9) Section 230.40 is amended by deleting Exception No. 1.
- (10) Section 230.79, subsection (C) is amended by deleting the value of "one hundred (100) amperes" and substituting therefore the value of "one hundred fifty (150) amperes" as the minimum service disconnecting means rating for single family dwellings.
- (11) Section 230.95 (c) is amended by deleting the text in first paragraph and replacing it with the following text:
"(c) Performance Testing: The ground-fault protection system shall be performance tested when first installed on site. The test shall be conducted by an approved independent testing company. A written record of this test shall be made available to the City of Gaithersburg prior to the final approval of the electrical systems."
- (12) Section 250.62 is amended to add a new sentence at the end of the paragraph to read as follows:
"The grounding electrode conductor shall be of copper for all one- and two-family dwellings."
- (13) Section 250.70 (5) is amended to add new subsection (5) at the end of the paragraph to read as follows:
"In cases where a metal underground water pipe is not available, a concrete-encased electrode shall serve as the primary grounding electrode."
- (14) Section 250.52(A)(3) is amended to add the following sentence at the end of the paragraph: "In cases where a metal underground waterpipe is not available, a concrete-encased electrode shall serve as the primary grounding electrode."

- (15) Section 250.62 is amended to add the following sentence at the end of the paragraph: "The grounding electrode conductor shall be of copper for all one and two-family dwellings."
- (16) Section 310-5 is amended to read as follows:
"Section 310.5 Minimum size of conductors.
Whether solid or stranded, conductors shall not be smaller than No. 14 copper. Whether solid or stranded, conductors shall not be smaller than No. 4 aluminum or aluminum alloy for commercial buildings only. Use of aluminum or aluminum alloy conductors in residential buildings is prohibited in branch circuits."
- (17) Section 410.16, subsection (c) is amended to read as follows:
"410.16 (c) All fixtures installed in suspended ceilings shall be supported directly from the building structure. A tie wire, minimum size No. 12 steel, from each (opposite) end of the fixture, secured to the building structure will suffice. Tie wire supports shall be installed vertically, or as close to vertical as possible."

Exception: If the fixture is circular, and not more than 24" in diameter, at least one wire shall support the fixture as described above.
- (18) Section 424.14 Create new section 424.14 Wiring, to read as follows:
"424.14 Wiring for all fixed electric space-heating equipment must be copper."
- (19) Section 426.22 Create new subsection (f) to read as follows:
"(f) Nonheating leads shall be of copper wire only."
- (20) Section 426.23 Create new subsection (c) to read as follows:
"(c) Nonheating leads shall be of copper wire only."
- (21) Section 440.60 is amended by adding the following sentence to the end of the section:
"Duplex receptacles are not permitted for use with air-conditioning units."
- (22) Section 440.62, subsection (c) is amended to add the following statement at the end of the paragraph:
"Each individual room air-conditioning unit regardless of its current rating, shall be served by an individual circuit of not less than No. 12 copper wire, and must terminate at a single receptacle."
- (23) Section 700.18 is amended to add the following statements at the end of the paragraph:
(a) "Any building requiring standpipes shall have installed one (1) 30 ampere, 120 volt circuit for each standpipe riser, supplied from the

emergency panel. The wiring method for concealed work shall be conduit with appropriate metal boxes having gasketed flap door covers. The wiring method for concealed work shall be suitable for receiving the L5-20R NEMA type twist lock receptacle without damage."

- (b) "Supply wiring shall be at least 75 degrees C-type wire, one (1) single twenty (20) ampere three (3) wire twistlock receptacle (NEMA type L5-20R) shall be installed, at least as high as, and two (2) feet offset from each hose valve connection. Each outlet box shall be painted fire-alarm red in color and marked 'Only for Fire Department Use.'"

Sec. 7-15. Violations: injunctive relief.

Violations of this chapter are declared to be municipal infractions and enforceable pursuant to the provisions of Section 1-9. The maximum penalty for each initial and repeat violation shall be established by resolution of the City Council.

In addition thereto, the City may institute injunctive, mandamus or any other appropriate action or proceedings at law or equity for enforcement of this chapter or to correct violations of this chapter, and any court of competent jurisdiction shall have the right to issue restraining orders, temporary or permanent injunctions or mandamus or other appropriate form of remedy or relief.

ADOPTED by the City Council of Gaithersburg this 4th day of November, 2002.

SIDNEY A. KATZ, MAYOR
and President of the Council

DELIVERED to the Mayor of the City of Gaithersburg this 4th day of November, 2002. APPROVED by the Mayor of the City of Gaithersburg this 4th day of November, 2002.

SIDNEY A. KATZ, Mayor

THIS IS TO CERTIFY that the foregoing Ordinance was adopted by the City Council of Gaithersburg, in public meeting assembled, on the _____ day of _____, 2002, and that the same was approved/vetoed by the Mayor of the City of Gaithersburg on the _____ day of _____,

2002. This Ordinance will become effective on the _____ day of _____, 2002.

David B. Humpton, City Manager

ORDINANCE NO.

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Professions Article, Section 6-301, et. seq., of the Annotated Code of Maryland, or amendment of that section.

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"In all cases, copper-clad aluminum wire is prohibited."
- (25) Section 110.26(E) is amended by deleting the exception entirely.
- (26) Section 210.8(a) is amended by adding the following:
"(9) All 125-volt, single-phase, 15- and 20-ampere receptacles located within six (6) feet of a laundry sink or any other type of sink."

Exception: The laundry circuit as required by Sections 210.52(f) and 220.3.
- (27) Section 210.23 is amended by adding the following subsection (d), which reads as follows:
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"A small appliance branch circuit in dwelling occupancies served by a twenty ampere branch circuit shall have not more than eight (8) receptacle outlets."

- (28) Section 210.52(A) is amended by adding the following paragraph to the end of that section: "General lighting branch circuits in dwellings must not have more than 12 power consuming outlets. A duplex receptacle is considered to be one outlet. Smoke detectors are not considered to be power-consuming devices (for counting purposes.)"
- (29) Section 210.52(E) is amended adding the following sentence to the end of that section: "When an addition is made to an existing dwelling which is not equipped with an outside ground-fault circuit-interrupter (GFCI) receptacle, a GFCI receptacle, accessible at grade level, must be installed on the outside of the new addition."
- (30) Section 220.4(A) is amended by adding the following sentence and exceptions: "Each fixed appliance must be served by an individual branch circuit.
Exception No. 1: Electric baseboard heaters.
Exception No. 2: Appurtenant equipment to furnaces, such as humidifiers or electric air cleaners.
Exception No. 3: Other equipment having motors rated $\frac{1}{4}$ horsepower or less."
- (31) Section 230.2 is amended by adding a new subsection (F) entitled, "Individual Metering" to read as follows:
"(F) Individual meters to measure electrical consumption shall be provided for each dwelling unit of a multifamily group when such dwelling units have separate heating and/or cooling systems whose primary energy source is electricity."
- (32) Section 230.40 is amended by deleting Exception No. 1.
- (33) Section 230.79, subsection (C) is amended by deleting the value of "one hundred (100) amperes" and substituting therefore the value of "one hundred fifty (150) amperes" as the minimum service disconnecting means rating for single family dwellings.
- (34) Section 230.95 (c) is amended by deleting the text in first paragraph and replacing it with the following text:
"(c) Performance Testing: The ground-fault protection system shall be performance tested when first installed on site. The test shall be conducted by an approved independent testing company. A written

record of this test shall be made available to the City of Gaithersburg prior to the final approval of the electrical systems."

- (35) Section 250.62 is amended to add a new sentence at the end of the paragraph to read as follows:
"The grounding electrode conductor shall be of copper for all one- and two-family dwellings."
- (36) Section 250.70 (5) is amended to add new subsection (5) at the end of the paragraph to read as follows:
"In cases where a metal underground water pipe is not available, a concrete-encased electrode shall serve as the primary grounding electrode."
- (37) Section 250.52(A)(3) is amended to add the following sentence at the end of the paragraph: "In cases where a metal underground waterpipe is not available, a concrete-encased electrode shall serve as the primary grounding electrode."
- (38) Section 250.62 is amended to add the following sentence at the end of the paragraph: "The grounding electrode conductor shall be of copper for all one and two-family dwellings."
- (39) Section 310-5 is amended to read as follows:
"Section 310.5 Minimum size of conductors.
Whether solid or stranded, conductors shall not be smaller than No. 14 copper. Whether solid or stranded, conductors shall not be smaller than No. 4 aluminum or aluminum alloy for commercial buildings only. Use of aluminum or aluminum alloy conductors in residential buildings is prohibited in branch circuits."
- (40) Section 410.16, subsection (c) is amended to read as follows:
"410.16 (c) All fixtures installed in suspended ceilings shall be supported directly from the building structure. A tie wire, minimum size No. 12 steel, from each (opposite) end of the fixture, secured to the building structure will suffice. Tie wire supports shall be installed vertically, or as close to vertical as possible,"

Exception: If the fixture is circular, and not more than 24" in diameter, at least one wire shall support the fixture as described above.
- (41) Section 424.14 Create new section 424.14 Wiring, to read as follows: "424.14 Wiring for all fixed electric space-heating equipment must be copper."
- (42) Section 426.22 Create new subsection (f) to read as follows:
"(f) Nonheating leads shall be of copper wire only."

- (43) Section 426.23 Create new subsection (c) to read as follows:
"(c) Nonheating leads shall be of copper wire only."
- (44) Section 440.60 is amended by adding the following sentence to the end of the section:
"Duplex receptacles are not permitted for use with air-conditioning units."
- (45) Section 440.62, subsection (c) is amended to add the following statement at the end of the paragraph:
"Each individual room air-conditioning unit regardless of its current rating, shall be served by an individual circuit of not less than No. 12 copper wire, and must terminate at a single receptacle."
- (46) Section 700.18 is amended to add the following statements at the end of the paragraph:
 - (c) "Any building requiring standpipes shall have installed one (1) 30 ampere, 120 volt circuit for each standpipe riser, supplied from the emergency panel. The wiring method for concealed work shall be conduit with appropriate metal boxes having gasketed flap door covers. The wiring method for concealed work shall be suitable for receiving the L5-20R NEMA type twist lock receptacle without damage."
 - (d) "Supply wiring shall be at least 75 degrees C-type wire, one (1) single twenty (20) ampere three (3) wire twistlock receptacle (NEMA type L5-20R) shall be installed, at least as high as, and two (2) feet offset from each hose valve connection. Each outlet box shall be painted fire-alarm red in color and marked 'Only for Fire Department Use.'"

Sec. 7-15. Violations: injunctive relief.

Violations of this chapter are declared to be municipal infractions and enforceable pursuant to the provisions of Section 1-9. The maximum penalty for each initial and repeat violation shall be established by resolution of the City Council.

In addition thereto, the City may institute injunctive, mandamus or any other appropriate action or proceedings at law or equity for enforcement of this chapter or to correct violations of this chapter, and any court of competent jurisdiction shall have the right to issue restraining orders, temporary or permanent injunctions or mandamus or other appropriate form of remedy or relief.

ADOPTED by the City Council of Gaithersburg this ____ day of _____, 2002.

DELIVERED to the Mayor of the City of Gaithersburg this ____ day of _____, 2002. APPROVED/VETOED by the Mayor of the City of Gaithersburg this ____ day of _____, 2002.

SIDNEY A. KATZ, Mayor

THIS IS TO CERTIFY that the foregoing Ordinance was adopted by the City Council of Gaithersburg, in public meeting assembled, on the 4th day of November, 2002, and that the same was approved by the Mayor of the City of Gaithersburg on the 4th day of November, 2002. This Ordinance will become effective on the 25th day of November, 2002.

David B. Humpton, City Manager